

Notice of Allowability

Application No.

09/714,082

Examiner

David Lazaro

Applicant(s)

DONZIS ET AL.

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 3/14/05.
2. ☒ The allowed claim(s) is/are 2,4-10,12,13,16,17,20-22, 24-26, 28-30, 32, 34, 35 and 37-39.
3. ☒ The drawings filed on 16 November 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


SALEH NAJJAR
PRIMARY EXAMINER


David Lazaro
May 27, 2005

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dan Hu (40,025) on May 27, 2005.

The application has been amended as follows:

In the claims:

In Claim 5, line 6, please replace "the secure link is alive" with --a security association of the secure link is valid--.

In Claim 20, line 8, please replace "." with --,--.

In Claim 20, after line 8, please insert --wherein the keep-alive module is adapted to further monitor for at least one ping reply responsive to the at least one ping message to determine if a security association of the secure link is valid.--

In Claim 24, line 2, please replace "a" with --the--.

In Claim 26, line 10, please replace "the secure link is alive" with --a security association of the secure link is valid--.

In Claim 26, line 12, please replace "secure link is not alive" with --security association of the secure link is not valid--.

In Claim 34, line 8, please replace "the" with --a--.

In Claim 34, line 9, please replace "secure link is alive" with –a security association of the secure link is valid–.

2. The following is an examiner's statement of reasons for allowance:

3. The primary reason for allowance is the inclusion of specific limitations in methods and systems directed towards communications between nodes and other network elements involving the establishment of secure links. Particularly, each of the independent claims includes limitations directed to the monitoring for a ping reply to determine if a security association of an established secure link is valid; from Claim 5 "monitoring for at least on ping reply to determine if a security association of the secure link is valid"; from Claim 20 and 26 " wherein the keep-alive module is adapted to further monitor for at least one ping reply responsive to the at least one ping message to determine if a security association of the secure link is valid"; from Claim 32 "monitoring for at least one ping reply to determine if an IPsec security association of the secure link is valid"; from Claim 34 "monitoring for at least one ping reply from the remote node to determine if a security association of the secure link is valid"; and from Claim 38 "monitor for at least one ping reply to determine if a security association of the secure link is valid". Prior art shows the ping functionality is typically used in determining if a remote host is inactive/reachable or in determining network characteristics such as round-trip delay (See RFC 2151, Section 3.2 "Ping", Pages 6-7. Also see U.S. Patent 6,392,990 by Tosey et al. - Col. 6 lines 56-65). The prior art does not teach monitoring

for a ping reply to determine the validity of the security association of an established secure link the ping is sent over. Furthermore, this limitation is non-obvious in view of the prior art.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

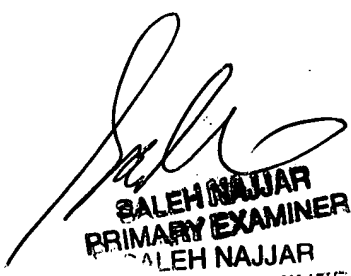
4. The prior art made of record and relied upon in the reasons for allowance is considered pertinent to applicant's disclosure.
5. RFC 2151 "A Primer on Internet and TCP/IP Tools and Utilities" by Kessler et al. June 1997. Discloses the known Ping utility in relation to the internet and TCP/IP.
6. U.S. Patent 6,392,990 by Tosey et al. "Method for Implementing Interface Redundancy in a Computer Network" May 21, 2002. Discloses the ICMP ping and its typical use in networking environments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David Lazaro
May 27, 2005


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